

IN THE ABSTRACT

Please amend the Abstract as follows:

ABSTRACT

~~The present invention relates to novel design of mechanical valve prostheses and manufacturing methods. A series of prosthetic valves with novel design and a unique manufacturing approach are disclosed. These devices possess unique designs and are made of nanostructured engineered biomaterial. In addition, a novel manufacturing approach will be used to produce these devices because the conventional technique is incapable of fabricating the devices due to the small size, design requirements and material properties restrain. Furthermore, it provides the convenience and thus low cost in manufacturing. The devices are particularly but not exclusively useful in human circulation system to restore the normal functions.~~

The disclosure concerns the valve prostheses, methods of manufacturing and fabrication of the same. The devices can be made of various materials, such as nanostructured engineered biomaterial. The valve prostheses are particularly useful in human circulation system to restore normal functions.